

REMARKS

Reconsideration and allowance of the above referenced application are respectfully requested.

The drawings stand rejected under rule 83. In response, Figures 2A - 2D have been amended to clarify their subject matter and to show the claimed invention more clearly.

The amendment dated June 20, 2002, stands objected to based on 35 USC 132 as allegedly introducing new matter. This contention is respectfully traversed, and therefore applicants decline the invitation to cancel the new matter. The rejection asserts that the added matter which is not supported by the original disclosure includes a gate electrode over the gate insulating film, and the first insulating film having the side that is aligned with the side of the crystalline semiconductor island. However, it is respectfully suggested that this is not in fact new matter, and that this added matter is supported by the original disclosure page 15 lines 18-22 and figures 1E-2A. This subject matter shows a gate electrode 111 over the gate insulating film 110, and shows the first insulating film 104 having a side that is aligned with the side of the crystalline semiconductor island 107. Therefore, it is respectfully suggested that this addition to the disclosure is not new matter and this therefore obviates the rejection based on new matter.

and also obviates the rejection based on 35 USC 112, first paragraph.

Claims 45-64 stand rejected under 35 USC 103(a) as allegedly being unpatentable over Yamazaki '132 in view of Matsumoto '084. Claim 46 has been amended to remove a typographical error. It is respectfully suggested that the claimed subject matter is not in any way taught or suggested by the cited prior art.

The present invention defines, for example as shown in claim 45, a semiconductor device with a crystalline semiconductor island that has silicon over a substrate. That crystalline semiconductor island has a source region, a drain region, and a channel formation region provided between the source and drain regions. A gate insulating film that is comprised of a first insulating film is over the crystalline semiconductor island, and the second insulating film is over the first insulating film. A gate electrode is over the gate insulating film. The first insulating film has a side that is aligned with the side of the crystalline semiconductor island. This is supported for example by embodiment 1 and figures 1-2.

The rejection asserts that it would have been obvious to one have ordinary skill in the art at the time of the invention to include the two gate insulating films of Matsumoto '084 into Yamazaki's invention, that is to provide a gate insulating film

Attorney's Docket No.: 07977-093002

3 having a side aligned with a side of the single crystalline semiconductor 2. However, this contention is respectfully traversed. The hypothetical combination of Yamazaki '132 and Matsumoto '084 would not specify which gate insulating film would have a side aligned with the side of the crystalline semiconductor island. For these reasons, the hypothetical combination can only be pieced together in the way that the rejection postulates with the benefit of hindsight. For these reasons, the hypothetical combination is respectfully suggested not to render obvious the claimed subject matter.

In view of the above amendments and remarks, therefore, all of the claims should be in condition for allowance. A formal notice to that effect is respectfully solicited.

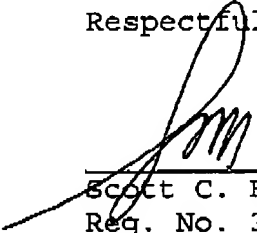
Please apply \$410.00 for a two month extension and any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,


FAX RECEIVED

MAR 17 2003

Date: 03/17/03

  
Scott C. Harris  
Reg. No. 32,030

TECHNOLOGY CENTER 2800

Fish & Richardson P.C.  
Customer Number: 20985 \*  \*  
4350 La Jolla Village Drive, Suite 500  
San Diego, CA 92122  
Telephone: (858) 678-5070  
Facsimile: (858) 678-5099

Attached is the marked-up version of the claims and corrected drawings.

Attorney's Docket No.: 07977-093002

Version of marked-up claims:

In the claims:

Please amend claim 46 as follows:

46. (Amended) A semiconductor device comprising:

a crystalline semiconductor island comprising silicon over a substrate, the crystalline semiconductor island comprising a source region, a drain region and a channel formation region provided between the source and the drain region; and

a gate insulating film comprising a first insulating film comprising silicon oxide [cover] over the crystalline semiconductor island and a second insulating film comprising silicon oxide over the first insulating film; and

a gate electrode over the gate insulating film,

wherein the first insulating film has a side aligned with a side of the crystalline semiconductor island.

2/6

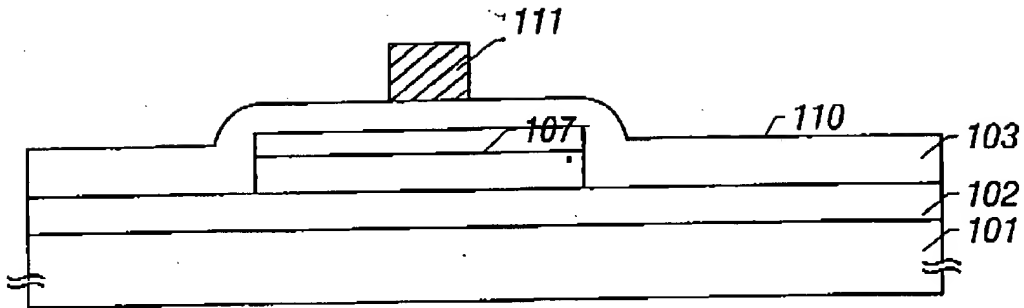


FIG. 2A

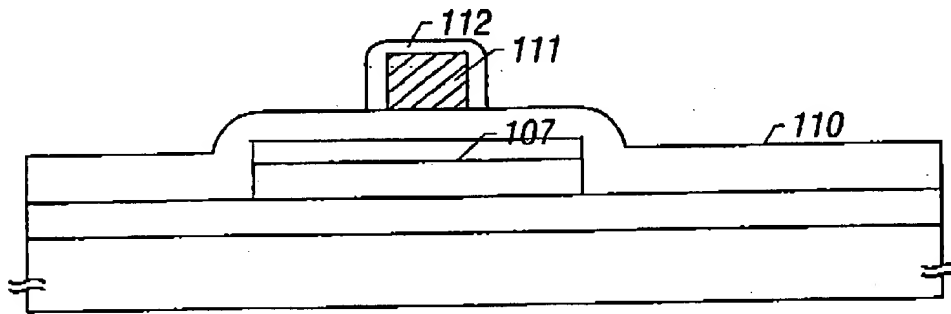


FIG. 2B

DOPANT ION IMPLANT

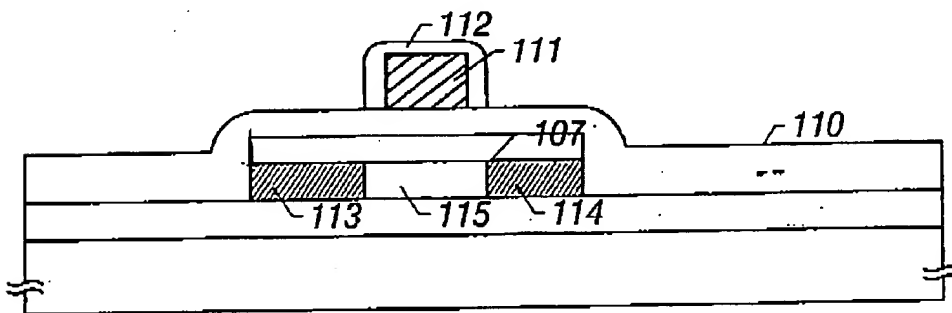
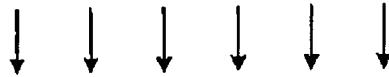


FIG. 2C

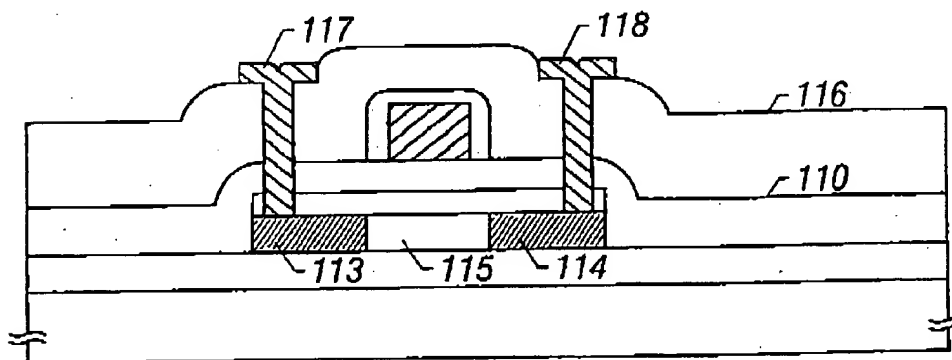


FIG. 2D